

Dentistry is becoming a technical replacement service rather than a part of a healing profession. This is the result of several factors:

1. The development of many versatile synthetic materials and high speed equipment (for fashioning dental replacements) has forced dental schools to teach new prosthetic techniques. Unfortunately, these technical courses have been crowding out biological sciences teachings so important in oral diagnosis and in the creating of a background for creative inquiry into the etiology of oral disease.
2. Another causative factor is the high cost of individual dental practice, forcing dentists to see greater remuneration. The public has been more ready to pay for material replacement and spectacular surgery than for less radical conservation of oral tissue and preventative dentistry.
3. Increasing refinement and softening of food is another cause of increased tooth debility, pressuring dentists to develop better replacement techniques.
4. The undergraduate in dentistry is not taught to recognize and to prevent early malfunctions resulting in a great many children at twelve years of age having extensive malocclusions. Parents must then either decide to spend a great deal of money (in orthodontic specialists fees) or allow the child to remain a dental cripple.
- Functional development of the jaw should be a fundamental concept to be taught to the undergraduate. This is not

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being adequately done.

5. The control of professional dental education by a licensing board is a strange arrangement. I believe this has inhibited the development of high calibre dental education in Ontario.
6. Ontario will never have a good oral health program until dental educational institutions shift their emphasis from the developing of more efficient odontal replacements to the encouraging of more imaginative dental research and teaching.
7. The image of dentistry as a cosmetic rather than a health service has been another deterrent in developing good oral health care. This image has been fostered by dentists' emphasis on the replacement services and, on a strong promotional program by powerful dental cosmetic manufacturers. Biased dental education is being provided by manufacturers of cosmetic dentifrices in agreement with short sighted public health bodies.

The public thinks of dental care as a cosmetic and pain reliever and not as a vital health service. The emphasis on mechanical treatment has opened the door to cosmetic dentifrice manufacturers to push all kinds of claims for their products without any responsibility for results. They can take thousands of dollars out of a community and are not held responsible for results of dental conditions in the community. Scientific, newer ideas are ignored or not evaluated.

Individual competitive practice is costly because of its:

- a. Elaborate equipment - (soon obsolete)
- b. Dependence on outside - technical assistants, who are independent of the dental profession.

- c. Design of equipment precludes any chairside assistance for the dentist.
- d. Dentists have not been trained to use qualified clinical personnel.
- e. Technical personnel have not been trained to work in service clinics and to understand practice relationships.
- f. There are not enough dentists to meet the needs of the public under the present system of practice.

Treatments could be handled by dental internes in decentralized clinics associated with hospitals or district health units. Unfortunately, under the present system, the only dental clinic of this type is a massive \$3,500,000 clinic at the University of Toronto. The Ontario taxpayers are not receiving adequate benefits from this single clinic. Decentralized clinics would give wider experience to interning dentists and result in increased dental care to more Ontario residents.

During the last twenty years, there has been little or no concerted effort by the Faculty of Dentistry, University of Toronto, to investigate the causes of oral diseases: to search for control of periodontal infections or to relieve the increased tragedy of malocclusions, prominent in 80% of children today.

The University of Toronto, Faculty of Dentistry had a marvelous reputation for creative research into the causes of dental diseases while Dr. H. K. Box was in charge of the research program. If, after Dr. Box's death, the Research Department had continued to pursue programmes that Dr. Box had initiated, instead of following less imaginative approaches of other dental schools, Toronto would have undoubtedly by now solved many of the problems of oral infection.

In my practise over the past sixteen years I have been carrying out principles advocated by Dr. Box and testing them through clinical studies. Clinical evidence has consistently verified his work. I believe that oral diseases are caused by specific infections. Research should be directed to the following purposes:

1. That a specific microorganism is the essential cause of an oral disease; the contributory factors, necessary for its clinical expression, are secondary or prominent causes.
2. That oral diseases resulting from infectious microorganisms and parasitism may affect seriously other parts of the body. The mouth is a portal for the entrance of infection into the body.
3. That mechanical restoration of a tooth, including its removal, does not necessarily limit an infectious process.
4. That tissues and structures may retain oral pathoses for years, even after having had restorative or surgical treatment. This may affect health, seriously and may lead to a variety of systemic diseased states. It is obvious that there is a need for the development and study of medications that will lead to the eradication of septic foci as rapidly as possible.
5. That further study or plural studies must be undertaken with appropriate microscopic and cultural techniques.
6. That with additional research funds, specific identifications would prove the presence of invasive organisms. Clinical testing would be best undertaken by Oral Medical Departments, preferably associated with a hospital.

7. After organisms have been identified and studied, agents, as cheomotherapeutics, antibiotics, vaccines, should be tested and used against them with the hope of eradicating them from the body.

I disagree strongly with dental schools' teaching that the removal of a tooth eliminates infection in a mouth; that the placement of artificial dentures over residual areas of infection eliminates oral sepsis. This teaching is based on false premises:

- a. The tooth is a product of the oral tissues. It is produced by the invagination into the oral tissues of the tooth germ and appears as a product of these same tissues. Therefore, the removal of the tooth does not necessarily clear up infection in the mouth any more than the removal of a fingernail necessarily clears up infection in a hand. There is ever increasing evidence that infection can remain in the tissues supporting the teeth and that mechanical treatment of a tooth alone, cannot remove it.
- b. There is a great deal of evidence to show that a tooth cavity, or a hole in a tooth, is only one sign of oral disease; that its repair does not necessarily remove an oral infection. Thus, although teeth may be "filled," infection continues in a child's or an adult's mouth and can do damage to the whole body.
- c. It is evident that prosthetic treatment of a tooth or teeth does not eliminate oral infection in the mouth. This is evidenced by the eventual loss of teeth by an individual.

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I disagree strongly with the lack of professional discipline and the protection afforded the public in dental services. Under the present practice of dentistry, extractions, surgery and all types of oral treatment come under the surveillance of an individual dentist. There is no overall control of the principles of treatment. This has been corrected and controlled in medicine by hospital boards and provincial hospital rating bodies. Dental patients are subjected, too often, to hasty decisions in individual dental offices. These may do untold harm to future health. Supervision under accredited hospital or clinic boards would prevent indiscriminate removal of teeth and would provide for treatment of oral diseases.

Possible Solutions:

1. Licenses should not be handled by the authority that handles academic policy. There should be a separate authority controlling academic training and research from the license to practise.
2. Recommendations from the Gies Report (1926)* and by the Survey of Dentistry (1961) † should be re-evaluated and implimented in:
 - a. A more liberal arts education and fundamental biological sciences
 - b. An indenturship in oral hospital or clinic services after academic training.
3. Clinical technical training should not be a part of a university curriculum. This should be located in out-patient departments in hospitals and in accessible oral health clinics throughout the province thus providing service to taxpayers who pay for it. The

present location of the only dental school clinic in Ontario has tended to produce young graduates dependant on technical training.

An academic atmosphere of the basic sciences would be more apt to stimulate creative research into the causes and into the prevention of oral diseases.

Technical training should be undertaken through internship under skilled professional men, as in medicine, providing oral health services to the public.

4. Universities must be responsible for research directed towards finding the causes of oral diseases, and increasing the effectiveness of therapies for the healing and the preservation of oral tissues. This is not the present policy.

The Imperatives of an Oral Health Service should be:

1. Oral health services to safeguard the quality of dental practices and preserve essential personal relations between patient and dentist.
2. Oral health services designed to encourage patients and families to retain their oral structures and to maintain them in good health. A main provision of services should be an incentive to keep people healthy rather than replacements of carelessness. Very few plans are adapted to the family who tries to remain healthy and to help themselves.
3. Oral specialists should be required to take a full year or more in graduate study in addition to the three years of undergraduate curriculum and the internship.

4. Technical training should be carried out in oral departments in hospitals under suitably trained professional men, where the sharing of knowledge with other health scientists could do much to improve the oral health care of Canadians.
5. Universities must be made responsible for research direction into the causes of oral diseases and the effectiveness of therapies for the healing and the preservation of the oral tissues.
6. Oral Health Services should be concurrently part of the Medicare Program for the Province of Ontario if it is to have a biological approach to the problems of oral diseases.

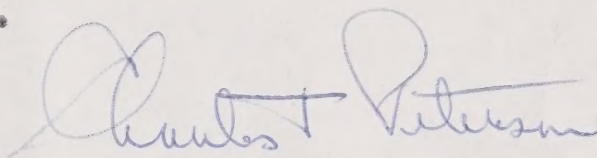
An Oral Health Service to the Citizens of Ontario could be:

1. Non compulsory (the public would understand its benefit)
2. Operated through private agencies
3. Available to all
4. Payments made quarterly
5. Insured for scientific health care, rather than for cosmetic treatments.
6. Doctor - patient relationship retained
7. The basic services of the general practitioner in dentistry included in a family plan of Medical Insurance Services.
8. An encouragement for children and adults to value healthy mouths and to provide an incentive to keep them healthy.

CONCLUSION:

Fulfilling the recommendations in this brief would provide Oral Health Services to all people in Ontario. It would provide for the preservation of oral structures rather than costly provisions for replacements and, would provide control for oral diseases.

Ultimately, there would be a great possibility that a child could go through life free of oral diseases, this, through the development of a vaccine or other scientific protective mechanism. This protection would be comparable to that resulting from diphtheria toxoids, smallpox vaccines, achieved in medicine today.



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- * Gies Report - Carnegie Foundation 1926
- + Survey of Dentistry (1961) - American Council of Education,
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